

## Patent claims

1. An implant (4) intended to be fitted in a hole (5)  
5 formed in a jaw bone (1), and comprising and/or  
assigned an outer surface (9) which can interact  
with the soft tissue (connective tissue) of the  
jaw bone and which can be placed at the mouth (6)  
10 of the hole, characterized in that the surface is  
completely or partially designed or coated with  
one or more porous outer layers (10) intended, on  
the one hand, to promote integration between the  
surface and the soft tissue, and, on the other  
15 hand, to counteract penetration of organisms or  
bacteria that cause inflammation, so as to ensure  
continued and substantial integration.
2. The implant as claimed in patent claim 1,  
20 characterized in that the porous layer (10) is  
arranged with pores having mean diameters (d) of  
ca. 1  $\mu\text{m}$  or less.
3. The implant as claimed in patent claim 1 or 2,  
25 characterized in that the porous layer (10) has a  
thickness (D) of at most 5  $\mu\text{m}$ , for example a  
thickness of 3  $\mu\text{m}$ .
4. The implant as claimed in patent claim 1, 2 or 3,  
30 characterized in that in addition to said surface  
(9), here called the first surface, which the  
implant comprises and/or is assigned, said implant  
has one or more other surfaces which are provided  
with a porosity (7) coarser than the porosity of  
35 the first surface, and in that the porosity of the  
first surface is reduced in relation to the  
coarser porosity and is chosen in the range of 30-  
40% thereof.
5. The implant as claimed in any of the preceding

patent claims, characterized in that the first surface (9) covers a very large area on an upper implant part, which is up to 1/3 of the total length of the implant.

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6. The implant as claimed in any of the preceding patent claims, characterized in that the first surface (9) is completely or partially situated on a part which can be applied to the implant or which is produced in one piece with the implant, for example an attachment component (6a), spacer sleeve, etc.

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7. The implant as claimed in any of the preceding patent claims, characterized in that the implant can be arranged in the bone tissue in such a way that the height of the soft tissue above the bone margin is 1.2 - 2.0 mm, preferably 1.5 - 1.8 mm, so that there will be remaining integration between the first surface (9) and the soft tissue (2), and exposure of the underlying implant sleeve is avoided.

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8. The implant as claimed in any of the preceding patent claims, characterized in that, at its upper/outer portion, it supports and/or interacts with inner and outer parts (6a, 6b), where the inner part (6a) supports the first surface (9) with the porous layer or layers (10), and the outer part (6b) can be temporarily removed during fitting of the implant.

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9. The implant as claimed in any of the preceding patent claims, characterized in that the porous layer (10) of the first surface (9) is based on anodic oxidation.

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10. The implant as claimed in any of the preceding patent claims, characterized in that, by means of

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the porous layer on the first surface (9), it entails only limited outer bone or tissue absorption (12) at the mouth (5a) of the hole.